Efficient transport networks are essential enablers for economic growth in successful economies.

The main role of transport infrastructure, for any country, is to facilitate connections between spatially divided industries, services and populations.
Does transport investment contribute to economic growth?

International evidence would suggest so - the vast majority of economic studies in this area in recent years found a positive relationship.

Returns can be very high especially when bottlenecks are relieved even in developed networks as is the case in Ireland.

Furthermore, in the context of our current and future transport networks, rigorous individual project appraisal and project selection processes will assist in ensuring productive investments in transport infrastructure.
THE BENEFITS OF TRANSPORT INVESTMENT

- Increases business efficiency
- Increases business investment and innovation
- Supports clusters and *agglomeration* of economic activity
- Improves the efficient functioning of labour markets
- Increases competition through access to new markets
- Triggers growth stimulating further growth
- Provides attractive business environment and good quality of life

2006 Eddington Study on benefits of transport investment for UK government
TII delivers projects supported by robust business cases:

- Direct (socio-) economic benefits
- Mixture of both direct and wider economic benefits
- Wider economic benefits
- Reduced journey times
- Greater reliability
- Safer routes
- Increased connections between areas

Business Case for Projects
CASE STUDIES: IMPACT OF TII PROJECTS

**Ex-Post Cost-Benefit Analysis**

- **LUAS System in Dublin**
  - Cost-Benefit ratio of 2.96
  - €991 million Cost - €2.9 billion Benefit

- **M4/M6 Motorway Corridor**
  - (a collection of five individual projects)
  - Cost-Benefit ratio of 1.56
  - €1.6 billion Cost - €2.6 billion Benefit

**Interviews with Stakeholders**

- Indirect Impacts
  - On balance more positive than negative
<table>
<thead>
<tr>
<th>STAKE HOLDER</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Dublin Chamber of Commerce</td>
<td>• Improved economic efficiency - Business serving country can consolidate operations in one location rather than running multiple bases nationwide</td>
</tr>
<tr>
<td>Ireland West Airport, Knock</td>
<td>• Increase in business for Dublin and Knock airports but contributed to closure of Galway Airport</td>
</tr>
<tr>
<td>Western Development Commission</td>
<td>• Peripheral regions without improved transport links – felt M4/M6 reinforced relative disadvantage</td>
</tr>
<tr>
<td>IBEC</td>
<td>• M4/M6 allowed improved collaboration between business in different cities and led to deeper labour markets available to those cities</td>
</tr>
<tr>
<td>IDA</td>
<td>• Such motorway links are an essential factor to attract investors to a location</td>
</tr>
<tr>
<td>STAKEHOLDER</td>
<td>COMMENT</td>
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<td>---------------------------------</td>
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</tbody>
</table>
| South Dublin Chamber of Commerce | • Very valuable social role played by the Red LUAS in connecting residents in its catchment area with hospitals, schools, colleges and cultural facilities  
|                                 | • Allowed enhanced labour mobility. Sandyford now hosts a large, mature cluster of information technology firms                             |
| Tallaght Hospital                | • LUAS availability makes staff recruitment easier. Facilitates Tallaght Hospital working in close co-operation with St. James’s hospital, with many key staff working in both locations |
| Fáilte Ireland                   | • LUAS improves the attractiveness of Dublin for visitors by providing a quick and simple way to travel to attractions outside the immediate city centre. “LUAS is superb…we could do with another 4 or 5 of them” |
Note: Accessibility score is set against highest zone for employment i.e. Rotunda Ward in south Dublin City Centre
### BENEFITS OF INVESTMENT ON THE MAJOR INTERURBAN ROUTES

#### Journey Time Savings

<table>
<thead>
<tr>
<th>Routes</th>
<th>1999</th>
<th>2013</th>
<th>Minutes Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>M50 - Border</td>
<td>79</td>
<td>48</td>
<td>30</td>
</tr>
<tr>
<td>M50 - Galway</td>
<td>157</td>
<td>104</td>
<td>50</td>
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<tr>
<td>M50 - Limerick</td>
<td>145</td>
<td>105</td>
<td>40</td>
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<tr>
<td>M50 - Cork</td>
<td>205</td>
<td>128</td>
<td>80</td>
</tr>
<tr>
<td>M50 - Waterford</td>
<td>125</td>
<td>86</td>
<td>40</td>
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</tbody>
</table>

#### Reduction in Fatal and Serious Collisions

![Graph showing reduction in fatal and serious collisions](image)

Since 1999 the safety of the national road network has greatly improved
IRELAND’S NATIONAL ROAD ASSET

2,700 km of National Primary Roads
Linking main cities and towns

2,700 km of National Secondary Roads
Linking villages and townlands
UNFINISHED BUSINESS?

- Completed Majors
- Under Construction
- With Planning but not on Capital Programme
- Progress to Construction with Planning Approval
- Subject to Planning Approval
FILLING INFRASTRUCTURAL GAPS

• The merits of agglomeration impacts are accepted

• Cork to Limerick corridor displays significant potential benefits due to agglomeration

• Impacts along corridor but also extend northwards towards Galway
The 2016 Census tells us that the population of Ireland is rising. The population is forecasted to increase to between 5.2m and 6.7m by 2046.
STATE OF THE NETWORK (2030)

National Road Network requires investment due to natural growth in demand.
VEHICLE KM TRAVELLED IN NATIONAL TRANSPORT MODEL

How is the asset used?

Trips < 50km in length

Trips > 50km in length
## TRANSPORT INFRASTRUCTURE INVESTMENT 2016-2021

<table>
<thead>
<tr>
<th>Awaiting Planning</th>
<th>Approaching Contract Award</th>
<th>Under Construction</th>
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<tbody>
<tr>
<td>Metro North</td>
<td>N4 Collooney to Castlebaldwin</td>
<td>Luas Cross City</td>
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<tr>
<td>N6 Galway Bypass</td>
<td>N5 Westport to Turlough</td>
<td>Gort to Tuam PPP</td>
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<tr>
<td>N2 Slane Bypass</td>
<td>M7 Naas Newbridge Upgrade</td>
<td>Gorey Enniscorthy PPP</td>
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<tr>
<td>N20 Mallow Relief Road</td>
<td>N8/N25 Dunkettle</td>
<td>New Ross By Pass</td>
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<tr>
<td>N21/N69 Adare to Foynes</td>
<td>N22 Ballyvourney to Macroom</td>
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<tr>
<td>N28 Cork to Ringaskiddy</td>
<td>N56 Dungloe to Glenties</td>
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<td></td>
<td>N56 Mountcharles to Inver</td>
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<tr>
<td></td>
<td>N59 Moycullen Bypass</td>
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</table>
### ROLLOUT OF CAPITAL INVESTMENT PLAN SCHEMES

<table>
<thead>
<tr>
<th>Scheme Name</th>
<th>Construction Start Date</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>Post 2025</th>
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<tbody>
<tr>
<td><strong>Schemes with Planning Approvals</strong></td>
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<tr>
<td>N7 Naas Newbridge Upgrade</td>
<td>Q2/17</td>
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<tr>
<td>M8/N40/N25 Dunkettle</td>
<td>Q1/19</td>
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<tr>
<td>N4 Collooney to Castlebaldwin</td>
<td>Q2/19</td>
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<td>N22 Ballyourney to Macroom</td>
<td>Q1/20</td>
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<tr>
<td>N5 Westport to Turlough</td>
<td>Q1/21</td>
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<tr>
<td>N59 Moycullen Bypass</td>
<td>Q1/21</td>
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<tr>
<td>N56 Mountcharles to Inver (Rolling Programme)</td>
<td>Q4/17</td>
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<tr>
<td>N56 Dungloe to Glenties (Rolling Programme)</td>
<td>Q1/18</td>
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<td><strong>Schemes to be progressed subject to Planning</strong></td>
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<tr>
<td>N20 Mallow Relief Road (incl. land)</td>
<td>Q1/21</td>
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<tr>
<td>N2 Slane Bypass (incl. land)</td>
<td>Q4/21</td>
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<tr>
<td>N6 Galway City Transport Project (incl. land)</td>
<td>Q2/22</td>
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<tr>
<td>N21/N69 Adare to Foynes</td>
<td>Q3/22</td>
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<tr>
<td>N28 Cork to Ringaskiddy</td>
<td>Q3/22</td>
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**KEY**
- Planning & Design
- Advance Works
- With An Bord Pleanala
- Tender
- Construction
- Closeout
M17/M18 GORT TO TUAM PPP

Typical Construction

Rathmorriasy Junction
N8/N25 DUNKETTLE INTERCHANGE UPGRADE
EXISTING N4 AT DRUMFIN - N4 COLLOONEY TO CASTLEBALDWIN

Existing

- *Sub-standard Single carriageway*
- *Variation in cross-section*
- *Narrow, poorly aligned road minor Junctions and accesses*
- *No overtaking due to continuous centreline road markings (70% of length)*
- *Speed limit of 50kph through Castlebaldwin*
N5 WESTPORT TO TURLOUGH (WITH CROAGH PATRICK AHEAD)
N56 DUNGLOE TO GLENTIES

A Lifeline Project?
GALWAY TRANSPORT STRATEGY

Stráiteís lompair na Gaillimhe
Galway Transport Strategy

An Integrated Transport Management Programme for Galway City and environs

Draft | June 2016

Public Transport

Smarter Mobility
CITY SOLUTIONS

Public Transport

• High Capacity
• Efficient
• Reliable

BRT

Commuter Trains

Light Rail

Metro
DUBLIN LIGHT RAIL NETWORK 2035

The Transport Strategy for the Greater Dublin Area sets out a light rail network which, looks like this.

TII is fully supportive of and is looking forward to delivering it.
NEW METRO NORTH

Construction: 2021 - 2026

Start Operation: 2027

16km light rail link
City Centre - Dublin Airport - Swords.
  • high frequency
  • high speed
  • high capacity

Modified version original Metro North
  • less tunnelling
  • fewer stations
  • smaller stations
TRANSPORT INFRASTRUCTURE WORKS

Public Investment

Increased Capacity to Fund New Investment

Increased Tax Base and Revenue

Increased Productivity

Economic Population and Employment Growth

Reference: Spohr et al 2012 from SFILT